

Restoration in the Mississippi River Delta: Old River Control Structure to the Gulf of Mexico

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Louisiana Coastal Protection and Restoration Authority (CPRA)

CEER Conference, Session 61 July 31, 2014



Louisiana is Experiencing a Coastal Crisis



1,880 square miles lost since the 1930s

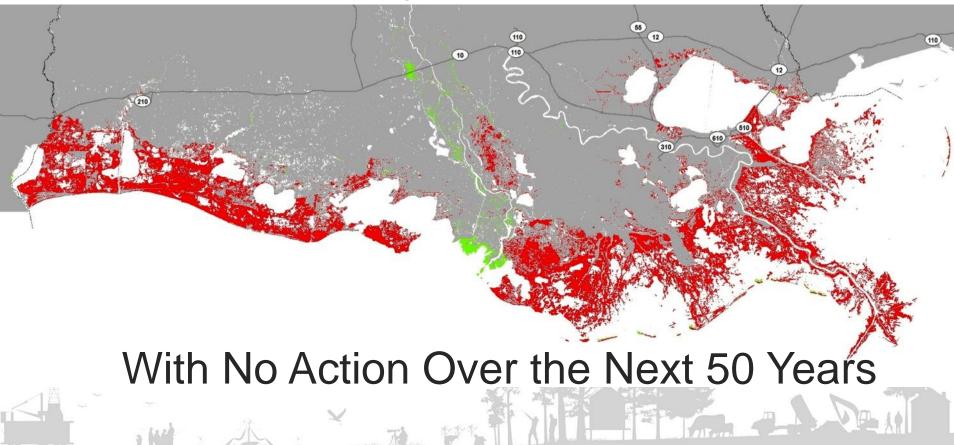






Our Coastal Crisis Will Continue

Potential to lose up to 1,750 square miles of land



Barrier Island Degradation

Major Causes Of Wetland Loss



Subsidence

Storms





Sea Level Rise

Sediment Reduction

Salt Water Intrusion







Levee System

Oil & Gas Development



- 1960's Mitigation program for wetland losses and Water Resources Development Act ('65)
- 1970's State Coastal Zone Management Program created.
- 1980's State-initiated restoration efforts: shoreline protection projects and sediment diversions.

State-created dedicated funding for coastal wetland restoration, and created <u>Coastal</u> Restoration Division on DNR.

1990's Federal program and funding: <u>Coastal Wetlands Planning, Protection and Restoration</u>
<u>Act (CWPPRA)</u> or "Breaux Act."

Caernarvon Freshwater Diversion opens in 1991 (authorized in 1965).

Louisiana generates first comprehensive plan for a sustainable coast: Coast 2050: Toward a Sustainable Coastal Louisiana. This plan was unanimously endorsed by all coastal parishes, the State Wetlands Authority, and the CWPPRA Task Force.

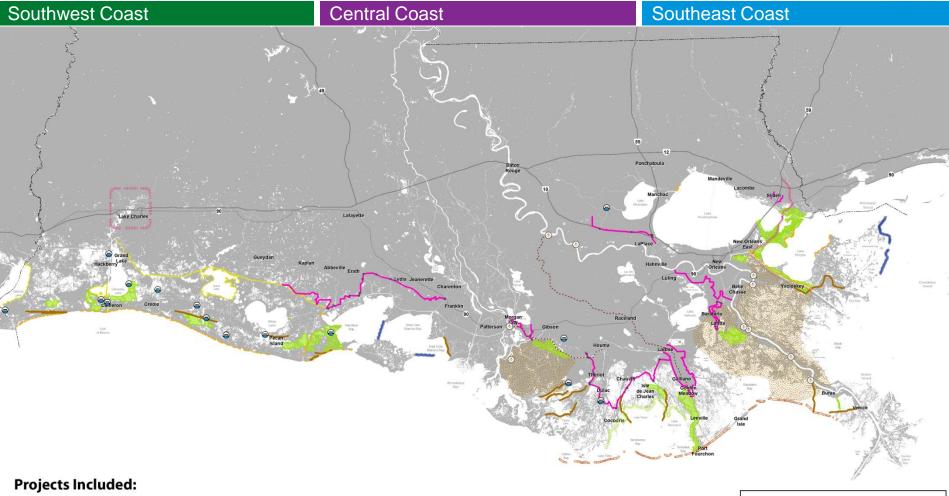
2000's LCA Study completed and signed by the Chief of Engineers of the USACE.

Louisiana's Comprehensive Master Plan for a Sustainable Coast (2007)

2010's Louisiana's updated Coastal Master Plan (2012)

Louisiana's 2012 Coastal Master Plan





Protection Stabilization Barrier Reef Restoration











Ridae



Shoreline

Protection





Barrier Island





Marsh

Creation



Sediment

Diversion



Hydrologic

Restoration

Projects for Further Planning:

Lake Pontchartrain Barrier Lake Charles Protection





Organizations Involved in Restoration































































Louisiana's Restoration Projects



Barrier Island Restoration



Hydrologic Restoration



Marsh Creation



Oyster Barrier Reefs



Shoreline Protection



Bank Stabilization



Ridge Restoration



Sediment Diversion

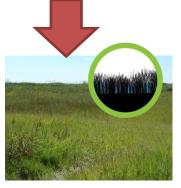
Louisiana's Restoration Projects



Barrier Island Restoration



Hydrologic Restoration



Marsh Creation



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Shoreline Protection



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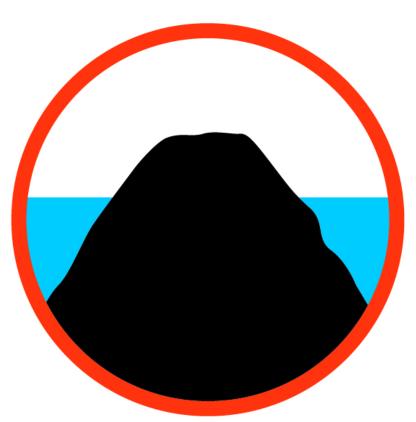


Ridge Restoration



Sediment Diversion

Barrier Islands



Creation and restoration of dune, beach, and back barrier marsh to restore or augment offshore barrier islands and headlands

West Belle Pass Barrier Headland Restoration (TE-52)



Marsh Creation



Creation of new wetland areas in open areas, generally involves sediment dredging and placement via pipeline

Marsh Creation: Bayou Dupont



Ridge Restoration



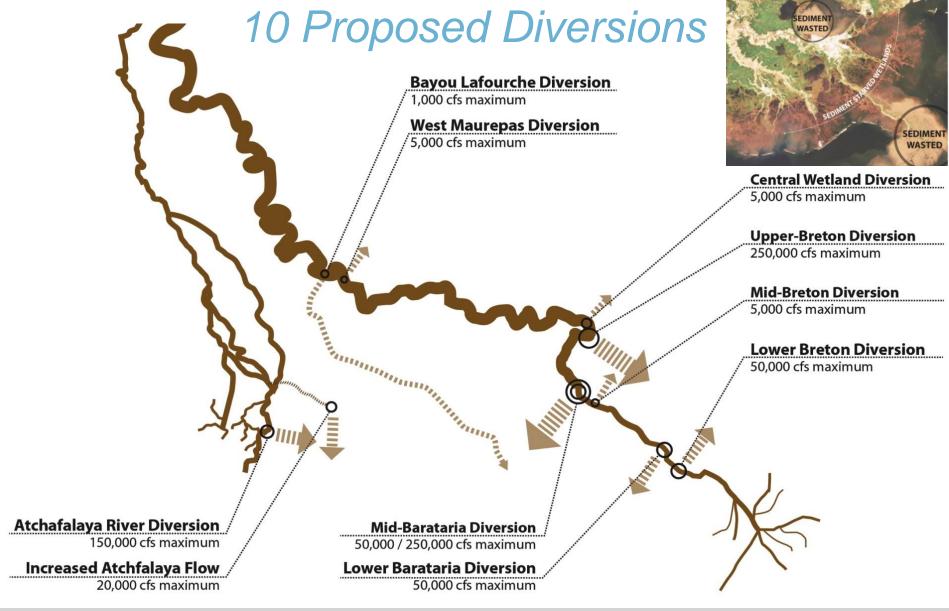
Re-establishment of historic ridges in basins through local dredging, sediment placement, and vegetative plantings to restore natural ridge functions



Sediment Diversion



2012 Coastal Master Plan



Projects Constructed / In Construction

Southwest Region 2008 - FY 2015











Oyster







Lafayette









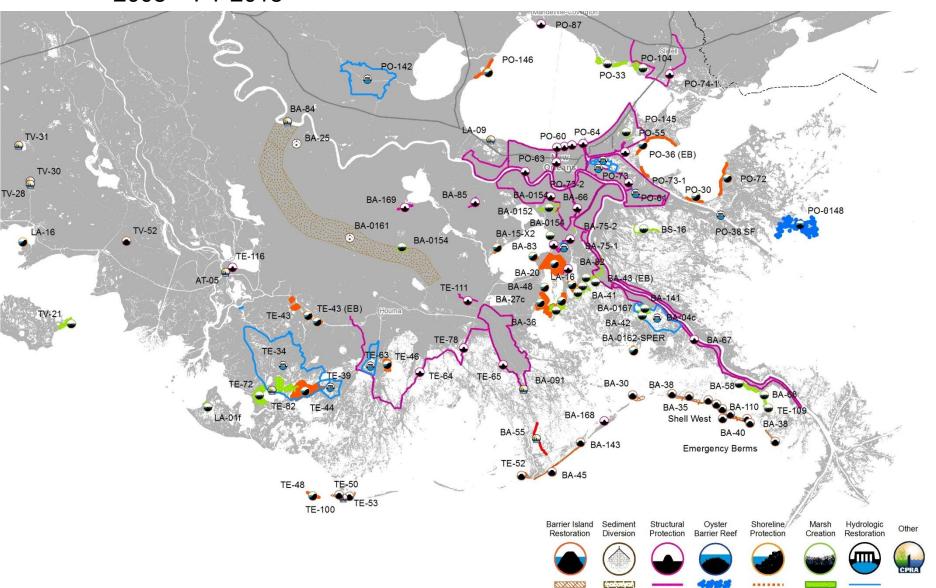






Projects Constructed / In Construction

Central and Southeast Regions 2008 – FY 2015



Moving Forward

Sediment

- Availability
- Effects on navigation

<u>Water</u>

- Availability
- Effects in receiving basin: hydrology, salinity, nutrients, vegetation, fisheries, socioeconomics

Questions?

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